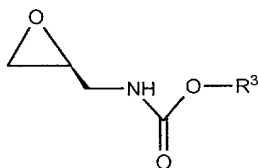
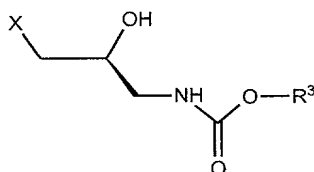


29. A method of preparing a (S)-epoxide having a general structural formula:



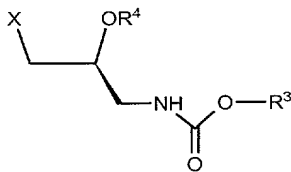
5 wherein R<sup>3</sup> is C<sub>1</sub>-C<sub>10</sub> alkyl, or a salt or hydrate thereof, comprising contacting

a) an (S)-secondary alcohol having a general structural formula:



10 wherein X is a halogen, alkylsulfonyl, or arylsulfonyl; or

b) an (S)-ester having a general structural formula:

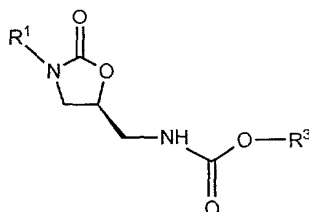


15 wherein R<sup>4</sup> is C<sub>1</sub>-C<sub>5</sub> alkylcarbonyl, with a lithium cation and a base whose conjugate acid has a pK<sub>a</sub> of greater than about 8.

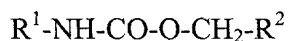
30. The method of claim 29 further comprising isolating the secondary alcohol in a crystalline form.

20 31. The method of claim 29 wherein the base is a tertiary-butoxide

32. A method of preparing an (S)-oxazolidinone having a general structural formula:

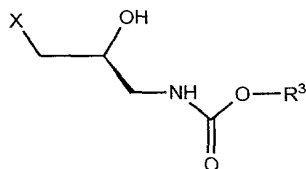


wherein R³ is C₁-C₁₀ alkyl, and R¹ is optionally substituted aryl, or a salt or hydrate thereof, comprising contacting a carbamate having a general structural formula:



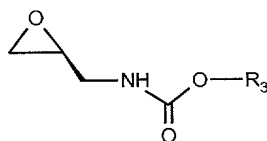
wherein R² is selected from the group consisting of C₁-C₂₀ alkyl, C₃-C₇ cycloalkyl, aryl optionally substituted with one or two C₁-C₃ alkyl or halogen groups, allyl, 3-methylallyl, 3,3-dimethylallyl, vinyl, styrylmethyl, benzyl optionally substituted on the phenyl with one or two Cl, C₁-C₄ alkyl, nitro, cyano, or trifluoromethyl groups, 9-fluorenylmethyl, trichloromethylmethyl, 2-trimethylsilylethyl, phenylethyl, 1-adamantyl, diphenylmethyl, 1,1-dimethylpropargyl, 2-furanylmethyl, isobornyl, and hydrogen, or a salt or hydrate thereof, with

i) a secondary alcohol having a general structural formula:



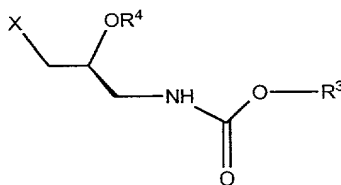
wherein X is halogen, alkylsulfonyl, or arylsulfonyl, or a salt or hydrate thereof;

ii) an (S)-epoxide having a general structural formula:



5

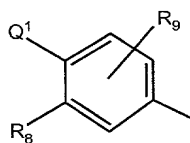
or iii) an (S)-ester having a general structural formula:



10 wherein R<sup>4</sup> is C<sub>1</sub>-C<sub>5</sub> alkylcarbonyl; in the presence of a lithium cation and a base whose conjugate acid has a pK<sub>a</sub> of greater than about 8.

33. The method of claim 32 further comprising isolating the (S)-oxazolidonone in a crystalline form.

15 34. The method of claim 32 wherein R<sup>1</sup> is:



wherein Q<sup>1</sup> is: R<sup>10</sup>R<sup>11</sup>N,